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10/017,590	12/18/2001	Seok Su Lee	HI-0047	6170

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EXAMINER	
KHAN, SUHAIL	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,590	LEE, SEOK SU	
	Examiner	Art Unit	
	Suhail Khan	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/24/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 11-15, 21-22 and 26 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6308061 to Criss et al.

Referring to **claim 1**, Criss et al disclose a method for downloading information (col 2, lines 51-54, software upgrades), comprising: communicating a request for a download operation from a base station controller to a base station (col 7, lines 22-44, mobile terminal communicates with host computer, interpreted as being the base station controller, via base station; host computer transmits software upload request to mobile terminal via base station); downloading the information to at least one mobile station through a paging channel (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel), the at least one mobile station storing the information (col 13, lines 59-62, file stored in the mobile terminal); and resetting the at least one mobile station using the stored information (col 14, lines 55-60, reset) and responding a downloading result from the at least one mobile station to the base station (col 13, lines 55-64, after an actual file is

downloaded and stored – the terminal generates another File Request Packet, thus indicating through the base station that the file has been downloaded).

Referring to **claim 2**, Criss et al disclose the method of claim 1, further comprising: communicating a downloading start message to a plurality of mobile stations through the paging channel at the same time (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel; col 11, lines 46-52, one or more mobile terminals); communicating a downloading response signal of the plurality of mobile stations to the base station controller (col 13, lines 55-64, after an actual file is downloaded and stored – the terminal generates another File Request Packet, thus indicating through the base station that the file has been downloaded; col 11, lines 46-52, one or more mobile terminals).

Referring to **claim 3**, Criss et al disclose the method of claim 2, wherein the downloading start message includes information of a version of software to be downloaded to the plurality of mobile stations, a size of a file, and a hardware type (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; col 20, lines 55-60, version identifier, required memory, file type; col 2, lines 5-10, software upgrade for obsolete hardware; col 9, lines 60-65, each entry included hardware address of mobile terminal).

Referring to **claim 4**, Criss et al disclose the method of claim 1, wherein a plurality of mobile stations respectively receive the information according to a software version and a hardware type contained in a downloading start message (col 2, lines 51-54, software upgrades; col 11, lines 46-52, one or more mobile terminals; col 19, lines 60-65, hardware address field).

Referring to **claim 5**, Criss et al disclose the method of claim 1, further comprising: communicating data messages downloaded from the base station controller to the at least one mobile station, via the base station (col 7, lines 22-44, mobile terminal communicates with host computer, interpreted as being the base station controller, via base station; host computer transmits software upload request to mobile terminal via base station); sequentially storing within the at least one mobile station, the downloaded data messages from the base station (col 13, lines 55-62, file stored in the mobile terminal, sequentially stepping through each file); communicating a downloading end message from the base station to the at least one mobile station, when the communication of the data messages is complete (col 15, lines 58-65, File Packet is interpreted as download end message as process ends on its reception by mobile station); determining with the at least one mobile station, whether the downloaded data messages are received with a normal state (col 15, lines 505-55, if file packet containing requested files is received within predetermined response period); and resetting the at least one mobile station, if the respective downloaded data messages are received with the normal state (col 14, lines 55-60, reset).

Referring to **claim 6**, Criss et al disclose the method of claim 5, wherein the at least one mobile station stores the downloaded data messages in a different memory position then that used to store an existing software (col 14, lines 45-50, fail safe mode) and the base station resets the at least one mobile station using the stored data messages when the downloaded data messages are received with the normal state (col 14, lines 55-60, reset).

Referring to **claim 7**, Criss et al disclose the method of claim 5, wherein the base station resets the at least one mobile station using the downloaded data messages when the downloaded data messages are received with the normal state (col 14, lines 55-60, reset).

Referring to **claim 11**, Criss et al disclose the method of claim 1, further comprising: communicating a location register message from the at least one mobile station to the base station after resetting the at least one mobile station (col 13, lines 55-64, mobile terminal transmits another File Request Packet, col 14, lines 5-10, file request field may have file storage location information, col 14, lines 55-60, reset); determining the downloading result during a predetermined time based on the location register message from the at least one mobile station; and reporting the downloading result to the base station controller (col 13, lines 55-64, after an actual file is downloaded and stored – the terminal generates another File Request Packet, thus indicating through the base station that the file has been downloaded).

Referring to **claim 12**, Criss et al disclose the method of claim 11, wherein the location register message includes a version of a current software and a hardware type (col 13, lines 55-64, mobile terminal transmits another File Request Packet; col 20, lines 55-60, version identifier, file type; col 2, lines 5-10, software upgrade for obsolete hardware; col 9, lines 60-65, each entry included hardware address of mobile terminal).

Referring to **claim 13**, Criss et al disclose the method of claim 1, wherein the information transmitted from the base station to the at least one mobile station is transmitted through the paging channel (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence

paging channel), according to a message queueing method (col 13, linea 55-64, sequentially stepping through each file name).

Referring to **claim 14**, Criss et al disclose the method of claim 5, wherein the data messages transmitted from the base station to the at least one mobile station are transmitted through the paging channel (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel), according to a message queueing method (col 13, linea 55-64, sequentially stepping through each file name).

Referring to **claim 15**, Criss et al disclose a method of communicating information (col 2, lines 51-54, software upgrades), comprising: sequentially communicating data messages from a common terminal to distributed terminals (col 21, lines 23-34, file downloaded to terminal; col 11, lines 46-52, one or more mobile terminals); storing the data messages in each of the distributed terminals (col 13, lines 59-62, file stored in the mobile terminal); and resetting an operational mode of the distributed terminals based on the stored data messages (col 14, lines 55-60, reset), wherein the common terminal communicates each of the data messages to all of the distributed terminals simultaneously through a shared communication channel (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, col 11, lines 46-52, one or more mobile terminals).

Referring to **claim 21**, Criss et al disclose the method of claim 15, further comprising: communicating a request from a system controller to the common terminal to download a file to the distributed terminals (col 7, lines 22-44, mobile terminal communicates with host computer, interpreted as being the system controller, via base

station, interpreted as being the common terminal; host computer transmits software upload request to mobile terminal via base station); communicating a download start message from the common terminal to the distributed terminals (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel; col 11, lines 46-52, one or more mobile terminals); and communicating a download response message from the common terminal to the system controller indicating a status of a download operation (col 13, lines 55-64, after an actual file is downloaded and stored – the terminal generates another File Request Packet, thus indicating through the base station that the file has been downloaded), wherein the download start message includes an identification of a file version, a file size, and a hardware type (col 20, lines 55-60, version identifier, required memory, file type; col 2, lines 5-10, software upgrade for obsolete hardware; col 9, lines 60-65, each entry included hardware address of mobile terminal).

Referring to **claim 22**, Criss et al disclose the method of claim 15, wherein: the data messages are queued by the common terminal with broadcast messages and reception messages for communication to the distributed terminals; and the queued messages are communicated in their respective order of arrival to a queue of the common terminal col 13, lines 55-64, sequentially stepping through each file, transmitting request, downloading; col 11, lines 46-52, one or more mobile terminals).

Referring to **claim 26**, Criss et al disclose a subscriber unit, comprising: a first means for receiving program data through a paging channel (col 2, lines 51-54, software upgrades; col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel); and a

second means for changing a program of the subscriber unit based on the received program data (col 8, lines 5-10, control various components within mobile terminals).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 8-10 and 16-20 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6308061 to Criss et al in view of U.S. Patent No. 5210751 to Onoe et al.

Referring to **claim 8**, Criss et al disclose the method of claim 5, wherein the data messages are stored sequentially (col 13, lines 55-60, sequentially stepping through each file name listed in the package definition file, request, download, store). Criss et al do not disclose that the data messages are stored sequentially with associated sequential numbers, except a data message received with an error is stored without the associated sequential number. The examiner maintains that the concept that the data messages are stored sequentially with associated sequential numbers, except a data message received with an error is stored without the associated sequential number was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number and sending incorrectly received data unit information to the memory circuit (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show that the data messages are stored sequentially with associated sequential numbers, except a data message received with an error is stored without the associated sequential number, as taught by Onoe et al, the motivation being to provide a signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 9**, Criss et al disclose the method of claim 8, for data messages (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message). Criss et al do not disclose that the data message received with the error is identified by the corresponding one of the associated sequential numbers as being received with an abnormal state and is downloaded again. The examiner maintains that the concept that the data message received with the error is identified by the corresponding one of the associated sequential numbers as being received with an abnormal state and is downloaded again was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show sending incorrectly received data unit information to the memory circuit to request retransmission (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show that the data message received with the error is identified by the corresponding one of the associated sequential numbers as being received with an abnormal state and is downloaded again, as taught by Criss et al, the motivation being to provide a signal transmission system which can reliably transmit

long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 10**, Criss et al disclose the method of claim 5, where the downloaded data messages are all transmitted to the at least one mobile station (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message) and the base station transmits the downloading end message (col 15, lines 58-65, File Packet is interpreted as download end message as process ends on its reception by mobile station). Criss et al do not disclose that the downloading end message includes a final sequential number. The examiner maintains that the concept that the downloading end message includes a final sequential number was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number (col 12, lines 24-35). And it is inherent that the last message received, i.e. the downloading end message will correlate with the final sequential number.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show that the downloaded data messages are all transmitted to the at least one mobile station and the base station transmits the downloading end message, including a final sequential number, to the at least one mobile station, as taught by Criss et al, the motivation being to provide a signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 16**, Criss et al disclose the method of claim 15, for data messages (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message).

Criss et al do not disclose that the method further comprises: identifying each of the data messages by a sequential number contained within the respective data messages; and storing the corresponding sequential number with each of the stored data messages. The examiner maintains the concept of identifying each of the data messages by a sequential number contained within the respective data messages; and storing the corresponding sequential number with each of the stored data messages was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show identifying each of the data messages by a sequential number contained within the respective data messages; and storing the corresponding sequential number with each of the stored data messages, as taught by Onoe et al, the motivation being to provide a signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 17**, Criss et al disclose the method of claim 15, for data messages (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message). Criss et al do not disclose identifying each of the data messages by a sequential number contained within the respective data message; storing, within each of the respective distributed terminals, the corresponding sequential number with each of the stored data messages that is received without an error; and identifying, with each of the respective distributed terminals, each of the data messages received with an error based on the

stored sequential numbers, wherein each of the sequential numbers omitted from storage identifies a corresponding one of the data messages received by the respective distributed terminal with an error. The examiner maintains that the concept of identifying each of the data messages by a sequential number contained within the respective data message; storing, within each of the respective distributed terminals, the corresponding sequential number with each of the stored data messages that is received without an error; and identifying, with each of the respective distributed terminals, each of the data messages received with an error based on the stored sequential numbers, wherein each of the sequential numbers omitted from storage identifies a corresponding one of the data messages received by the respective distributed terminal with an error was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number and sending incorrectly received data unit information to the memory circuit (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show identifying each of the data messages by a sequential number contained within the respective data message; storing, within each of the respective distributed terminals, the corresponding sequential number with each of the stored data messages that is received without an error; and identifying, with each of the respective distributed terminals, each of the data messages received with an error based on the stored sequential numbers, wherein each of the sequential numbers omitted from storage identifies a corresponding one of the data messages received by the respective distributed terminal with an error, as taught by Onoe et al, the motivation

being to provide a signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 18**, Criss et al disclose the method of claim 17, for data messages (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message) and communicating messages between distributed terminals and the common terminal (col 21, lines 23-34, file downloaded to terminal; col 11, lines 46-52, one or more mobile terminals; col 7, lines 22-44, mobile terminal communicates with host computer, interpreted as being the system controller, via base station, interpreted as being the common terminal). Criss et al do not disclose that the method further comprises: communicating, with each of the distributed terminals, each of the identified data messages received with an error to the common terminal; and communicating each of the identified data messages received with an error from each of the respective distributed terminals to a system controller. The examiner maintains that the concept of communicating, with each of the distributed terminals, each of the identified data messages received with an error to the common terminal; and communicating each of the identified data messages received with an error from each of the respective distributed terminals to a system controller was well known in the art as taught by Onoe et al.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number and sending incorrectly received data unit information to the memory circuit for re-transmission (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show communicating, with each of the

distributed terminals, each of the identified data messages received with an error to the common terminal; and communicating each of the identified data messages received with an error from each of the respective distributed terminals to a system controller, as taught by Onoe et al, the motivation being to provide a signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 19**, Criss et al disclose the method of claim 18, for data messages (col 21, lines 23-34, file downloaded to terminal; file transmitted as a message) and communicating messages between distributed terminals and the common terminal (col 21, lines 23-34, file downloaded to terminal; col 11, lines 46-52, one or more mobile terminals; col 7, lines 22-44, mobile terminal communicates with host computer, interpreted as being the system controller, via base station, interpreted as being the common terminal). Criss et al do not disclose further comprising: communicating the identified data messages, received by the respective distributed terminals with an error, to the respective distributed terminals again.

In a similar field of endeavor, Onoe et al show storing the correctly received data units with a related message order number and sending incorrectly received data unit information to the memory circuit for re-transmission (col 12, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show communicating the identified data messages, received by the respective distributed terminals with an error, to the respective distributed terminals again, as taught by Onoe et al, the motivation being to provide a

signal transmission system which can reliably transmit long messages even if the transmission paths used have relatively low reliability (Onoe et al, col 2, lines 5-10).

Referring to **claim 20**, Criss et al disclose the method of claim 17, wherein the common terminal collects the identified data messages from the distributed terminals for a predetermined period of time (col 15, lines 15-20, processor determines if File Name Packet has been received from the host computer in response to the Version Response Packet within a predetermined response period).

5. Claims 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6308061 to Criss et al in view of U.S. Patent No. 5544223 to Robbins et al.

Referring to **claim 23**, Criss et al disclose a data communication method, comprising: establishing a paging channel between a base station and a mobile station (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel); and downloading program data (col 2, lines 51-54, software upgrades) in the wireless local loop system, wherein the program data controls the mobile station (col 8, lines 5-10, control various components within mobile terminals). Criss et al do not disclose that the paging channel is established in a wireless local loop system. The examiner maintains that the concept of establishing a paging channel in a wireless local loop system was well known in the art as taught by Robbins et al.

In a similar field of endeavor, Robbins et al show paging in a wireless local loop (col 3, lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show establishing a paging channel between

a base station and a mobile station in a wireless local loop system; and downloading program data in the wireless local loop system, wherein the program data controls the mobile station, as taught by Robbins et al, the motivation being simplified construction of the concentrated subscriber system while maintaining maximum compatibility (Robbins et al, lines 10-15).

Referring to **claim 24**, Criss et al disclose the method of claim 23, wherein the program data transmitted through the paging channel are received in at least two mobile stations (col 11, lines 46-52, one or more mobile terminals).

Referring to **claim 25**, Criss et al disclose a base station subsystem, wherein the improvement comprises: a first means for generating a broadcasting message (col 11, lines 46-52, transmitting data); a second means for generating a reception message (col 11, lines 46-52, receiving data); a third means for generating a downloading message (col 2, lines 51-54, software upgrades); a message queue that queues the broadcasting message, the reception message, and the downloading message received from the first means, the second means, and the third means, respectively (col 13, lines 55-64, sequential transmission, transfer, download); and transmission means for transmitting the queued broadcasting, reception, and downloading messages through a paging channel (col 21, lines 23-34, the file field includes the contents of the file, file downloaded to terminal; file transmitted as a message, hence paging channel). Criss et al do not disclose that the paging channel is in a wireless local loop system. The examiner maintains that the concept of a paging channel in a wireless local loop system was well known in the art as taught by Robbins et al.

In a similar field of endeavor, Robbins et al show paging in a wireless local loop (col 3, lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Criss et al to show a first means for generating a broadcasting message; a second means for generating a reception message; a third means for generating a downloading message; a message queue that queues the broadcasting message, the reception message, and the downloading message received from the first means, the second means, and the third means, respectively; and transmission means for transmitting the queued broadcasting, reception, and downloading messages through a paging channel of a wireless local loop system, as taught by Robbins et al, the motivation being simplified construction of the concentrated subscriber system while maintaining maximum compatibility (Robbins et al, lines 10-15).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to Downloading Information to Wireless Units.

U.S. Pat. No. 6023620 to Hansson

U.S. Pat. No. 6041124 to Sugita

U.S. Pat. No. 5297192 to Gerszberg

U.S. Pat. No. 6587684 to Hsu et al

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suhail Khan whose telephone number is (571) 272-7910.

The examiner can normally be reached on M-F from 8 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (571) 272-7905.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sk

CHARLES APPIAH
PRIMARY EXAMINER